

## MISCELLANEOUS ADDITIONS AND REVISIONS TO THE FLOWERING PLANTS

## OF JAMAICA II

C. D. Adams

## ANTHURTIUM (ARACEAE)

ANTHURTIUM MANCUNIENSE C. D. Adams, sp. nov.

A. venosi Griseb. affine sed foliorum laminis majoribus plerumque cordatis sinibus latis vel truncatis et viridibus impolitis; spatha rigide erecta spadiceam plus minusve aequantem differt.

Herba terrestris vel rupestris perennis glabra; rhizoma crassa erecta demum parce ramosa radices crassiusculis adventitiis. Prophylla elongato-ovata carinata apicibus apiculatis vel aristatis usque ad 20 cm longa et 9 cm lata ubi complanata. Petioli solidi adaxiale plani vel parum sulcati abaxiale rotundati 12-30 cm longi. Foliorum laminae ovatae vel lanceolatae, basi cordatae sinibus latis vel truncatae, apice acutae vel obtusae apiculatae, nervis e basi palmatis in paribus duobus tribusve et e costa pinnatis utroque circa sex, coriaciae, virides impolitaе subtus leviter pallidiores, 25-57 cm longae, 13-38 cm latae. Scapus robustus teres, 9-20 cm longus. Spatha oblongo-ovata apice navicularis rigide erecta, initio rubella postea olivacea vel viridis, 6-16 cm longa usque ad 8 cm lata. Spadix oblongus plus minusve decrescens fumosus, 7-16 cm longa. Perianthium 2 mm longum, 2-2.5 mm latum. Filamenta oblanceolata. Fructus baccatus succulentus oblongus proximale albus distale purpureus, 7-8 mm longus, ca. 4 mm latus, ubi perfectus 2-seminalis in pulpa mucilagina, e perianthio extrusus et ad maturitatem carpophoro filiformi pendulus. Semina plano-convexa, 4-5 mm longa, 2.5-3 mm lata, ochracea.

Type Collection: Wm. Harris 8833 (holotype UCWI), growing in crevices of precipitous honey-combed rocks, near Troy, Trelawny Parish, Jamaica, elev. ca. 2000 feet, 6 December 1904.

Paratypes: G. R. Proctor 9952 (IJ unicate), on partly shaded limestone ledge, Tyre District, 2 miles north of Troy, Trelawny Parish, Jamaica, elev. ca. 1750 feet, 14 March 1955; C. D. Adams 6095 (UCWI unicate), on limestone cliff in forest, Oxford Caves to Balaclava junction, Manchester Parish, Jamaica, elev. 700 feet, 7 January 1960; G. R. Proctor 22975 (IJ), shaded limestone cliff, vicinity of Aughtembeddie, Manchester Parish, Jamaica, elev. ca. 1750 feet, 1 December 1962; C. D. Adams 12443 (UCWI), on steep cliff, Cockpit, ca. 5 miles north-west of Troy, Trelawny Parish, Jamaica, elev. 1750 feet, 4 April 1963.

Specimens of this species were earlier determined as A. grandifolium (Jacq.) Kunth and later as A. venosum Griseb.; it

differs from both these in the rigid erect boat-shaped spathe which is about as long as the spadix. It is restricted in its present known distribution to a small area near where the boundaries of the parishes Trelawny, Manchester and St. Elizabeth meet.

#### DENDROPANAX (ARALIACEAE)

DENDROPANAX OVALIFOLIUS (Fawcett & Rendle) C. D. Adams, comb. nov.

Gilibertia ovalifolia Fawcett & Rendle in Journ. Bot. 64: 158. 1926. TYPE: Harris 9188, Lapland, near Catadupa, St. James, Jamaica.

This new combination is the result of re-appraisal of the value of the character of the articulation of the peduncle. When given greater weight this feature relates D. elongatus Britton and D. ovalifolius closely to D. pendulus (Sw.) Decne. & Planch. The number of flowers in an umbel is regarded as a feature greatly affected by the age of the plant so that D. elongatus goes into the synonymy of D. pendulus while D. ovalifolius can be separated on the basis of leaf-shape.

DENDROPANAX NUTANS (Sw.) Decne. & Planch. var. OBTUSIFOLIA C. D. Adams, var. nov.

Folia apice plerumque obtusa vel rotundata vel raro subacuta.

Type Collection: C. D. Adams 10693 (holotype UCWI; isotype EM), Blue Mountain Peak, St. Thomas Parish, Jamaica, elev. 6800 feet, 18 February 1962; "Tree 20 feet with crooked thick twigs."

Although the type specimen of this variety was made from a gnarled tree with clustered rather small leaves and short inflorescences, the fact that the obtuse-leafed variant occurs also in company with var. nutans in several parts of the range suggests that it is not merely an ecad of exposed situations. There is some purpose in establishing a name for this variety, but in view of the lack of knowledge of causes of variation in the genus and the close affinities of most of the Jamaican species, it might be misleading to cite paratype and other specimens.

#### FEMBRISTYLIS (CYPERACEAE)

FEMBRISTYLIS HARRISII (Britton) C. D. Adams, comb. nov.

Stenophyllus harrisii Britton, Torreya 20: 83. 1920.  
TYPE: Harris 12890, Old England Falls, Blue Mountains, Portland, Jamaica.

This rare and local plant is characterized by its dense tufted growth consisting mainly of numerous slender scapes subtended by reduced leaves. Inflorescences are small of few spikelets and nearly always viviparous. Besides the type locality, it is known from exposed hillsides on serpentine in the area of Arnully, St. Thomas parish (Adams 12224, EM, Mo, UCWI) in association with a number of other very rare plants in Jamaica including

Rhynchospora lindeniana Griseb., Phoradendron anceps (Spreng.) Krug & Urb. and Polystichum tridens (Moore) Fee. There are many species in common with Cuba and Hispaniola in this local flora and Fimbri-stylis harrisii may not be different from Bulbostylis subefimbriata Kükenth. William Harris collected further specimens of this species from the type locality on 3 March 1919; some of the duplicates of this gathering which were distributed to other herbaria were numbered 12098; the specimen in herb. UCWI is numbered 12908 and this is likely to be correct assuming chronological numbering as the type (12890) was collected on 4 September 1918.

#### LOBELIA (CAMPANULACEAE)

LOBELIA CALEDONIANA C. D. Adams, sp. nov.

L. assurgentis L. affinis sed foliorum marginibus proximalibus integris distalibus crenatis, capsulis non mutantibus; a L. fawcettii Urb. corolla pubescenti differt.

Frutex caule flexili usque ad 1.5 m altus; latex copiosus albus erubescens. Folia oblanceolata basi anguste cuneata integrae apice acuminata crenatae membranacea tenuiter pubescentia usque ad 28 cm longa et 7.5 cm lata, distincte petiolata. Inflorescentia subterminalis subscaeposa unilateralis pubescens scapo 5-7 cm longo pedicellis numerosis ca. 18 mm longis rectis, bracteis linearibus ca 1 cm longis, bracteolis linearibus ca. 5-7 mm longis. Ovarium turbinatum 6-7 mm longum. Sepala linearia minute remoteque dentata ca. 13 mm longa. Corolla initio curvata longe secedens 4-4.5 cm longa pallide viridis. Stamina filamenta et tubus ca. 28 mm longa albedo-viridia, antherae inaequales curvatae barbatae 8-11 mm longae. Stylus staminibus longior. Capsula cyathiformis diaphragmate apicali dehiscenti ca. 7-9 mm lata. Semina pallida pyriformia 0.7-0.8 mm longa.

Type Collection: C. D. Adams 12547 (holotype UCWI; isotypes BM, GH), on limestone rocks in montane woodland, Mount Caledonia, Portland Parish, Jamaica, elev. 4600 feet, 19 May 1963 (plant in flower).

Paratypes: C. D. Adams 11629 (UCWI unicate), type locality as above, 5 September 1962 (plant in fruit); W. R. Anderson & D. C. Sternberg 3295 (DUKE, UCWI), type locality as above, 26 July 1966 (plant in fruit).

This new species falls close to L. assurgens L. from which it differs in having the proximal margins of the leaves entire rather than furnished with filiform appendages; the stem is not winged by decurrent leaf-bases; the pedicels are not recurved in fruit. It also resembles L. fawcettii Urb. but the corolla is pubescent.

## PALICOUREA (RUBIACEAE)

*PALICOUREA WILESII* C. D. Adams, sp. nov.

*P. pulchrae* Griseb. affinis sed corolla brevior pallidiorque et *P. crocea* (Sw.) Schult. sed foliis plerumque glabris et corolla longiore nunquam rubra vel aurantiaca.

Frutex 1.2-4 m vel arbor usque ad 5 m alta plerumque glabra. Folia late lanceolata basi cuneata apice acuminata extremum acuta, 8-22 cm longa, 3-7.5 cm lata nervis lateralibus utroque latere 8-14. Petioli 1-2 cm longi. Stipulae subsistentes in situ marcescentes dentibus binatis distantibus subulato-lanceolatis 3-5 mm longis. Inflorescentia minute puberula ramis malvinis purpurascens raro flavidis; bracteae subulatae. Calycis tubus 1 mm longus segmenta deltata 0.4-0.5 mm longa. Corolla omnino 11-19 mm longa lobis 2-3 mm longis alba malvina magenteave. Fructus laevis niger 5-6 mm longus latusque in sicco bilobatus.

Type Collection: J. Wiles (holotype BM).

Paratypes: Wm. Harris 5203 (BM, UCWI), Claverty Cottage, Portland Parish, Jamaica, 6 June 1894; Wm. Harris 5180 (UCWI), Whitfield Hall, St. Thomas Parish, Jamaica, 2 June 1894; Wm. Harris 6312 (BM, UCWI), Whitfield Hall, St. Thomas Parish, Jamaica, elev. 2000 feet, 20 May 1896; W. R. Maxon 8678 (BM), on rocky forest slope, Flamstead, St. Andrew Parish, Jamaica, elev. 1000-1100 m, 31 May 1926; G. L. Webster & K. A. Wilson 5139 (BM, IJ), John Crow Mts. Portland Parish, Jamaica, elev. 1000-1500 feet, 6 August 1954; C. D. Adams 7475 (BM, DUKE, UCWI), in woodland, Greenwich Bridle road, St. Andrew Parish, Jamaica, elev. 3700 feet, 6 July 1960; also C. D. Adams 7486 (M, UCWI), 7910 (M, UCWI), 9383 (UCWI), 11926 (BM, UCWI), 13237 (UCWI); M. duQuesnay 324 (UCWI); J. K. New (UCWI); G. R. Proctor 8076 (IJ), 23278 (IJ).

This species is rather common in submontane woodlands on shale or limestone in eastern Jamaica. *Palicourea pulchra* Griseb., also endemic, is its vicariant in central and western parishes. The affinity of both these species is with the widespread *P. crocea* (Sw.) Schult. from which they differ in having larger corollas never orange or red. *P. crocea* is almost always quite markedly hairy in Jamaica although towards the southern part of its range it becomes glabrous; S. Moore in Fawcett & Rendle, Flora of Jamaica, Vol. 7 referred the plant now being described as *P. wilesii* to *P. riparia* Benth. but that is generally regarded as representing the southerly variants of *P. crocea*.

The collector, James Wiles, accompanied Capt. Bligh on his second trip to the Pacific as a gardener. On returning to the West Indies Wiles was charged with the duty of establishing the bread-fruit plants first in St. Vincent and then in Jamaica which he did successfully.

## PSYCHOTRIA (RUBIACEAE)

PSYCHOTRIA DOMATIATA C. D. Adams, sp. nov.

P. corymbosae Sw. aliquantum simile sed foliis ellipticis basi late cuneatis et corolla alba.

Frutex puberulus 2-2.5 m altus vel arbor usque ad 6 m alta. Folia obovato-elliptica vel elliptica basi late cuneata apice breviter acuminata 4-17 cm longa 2-7 cm lata nervis lateralibus utroque latere 7-11 subtus axillis caespitoso-pilosis pallidiora nervo medio rubello. Petioli usque ad 3 cm longi. Stipulae subpersistentes in situ marcescentes dentibus binatis deltatis 2 mm longis. Inflorescentia puberula pedunculo viridi vel rubiginoso 2-2.5 cm longo; bractae bracteolaeque lanceolato-subulatae. Calycis segmenta ovata 0.6 mm longa ciliata. Corollae tubus 3-4 mm longus tomentosus eburneus. Fructus drupaceus atro-purpureus in sicco bilobatus 5 mm longus et 6 mm latus.

Type Collection: C. D. Adams 9375 (holotype UCWI, unicate), in wet forest on limestone, Ecclesdown, Portland Parish, Jamaica, elev. 1750 feet, 29 March 1961 (plant in flower).

Paratypes: H. A. Osmaston 5175 (BM, UCWI), in dense mossy thicket, uppermost part of Big River, above Spring Valley Estate, Portland Parish, Jamaica, elev. 3000 feet, 6 August 1967 (plant in flower); also R. A. Howard, G. R. Proctor & Wm. T. Stearn 14757 and G. R. Proctor 10464.

This new species resembles Psychotria corymbosa Sw. but has elliptical leaf-blades broadly cuneate at the base. Although the inflorescence sometimes is tinged reddish, it does not have the characteristic bright mauve or purple coloration of P. corymbosa and the corolla is white.

PSYCHOTRIA PEDUNCULATA Sw. var. CAUDATA C. D. Adams, var. nov.

Folia apice caudato-acuminata. Inflorescentiae pedunculus rami calyx corollaque pubescens.

Type Collection: C. D. Adams 7296 (holotype UCWI; isotypes BM, GH), Aenon Town to McKoy, Clarendon Parish, Jamaica, elev. 2000 feet, 26 June 1960; "Tree 15 feet; corolla yellow except inside of lobes white."

Paratypes: C. D. Adams 9454 (UCWI), Union Hill, Moneague, St. Ann Parish, elev. 1400-1500 feet, 25 June 1961; "Small tree to 20 feet; corolla very pale yellow; flower-buds yellow."; H. A. Osmaston 5017 (BM, UCWI), steep forested cockpit sides, Jericho-Garlands road, Maroon Town, St. James Parish, Jamaica, elev. 1800 feet, 12 July 1967; "Understorey shrub 2 m high; corolla white." M. duQuesnay 312 (UCWI), woodland margin, Aenon Town to McKoy, Clarendon Parish, Jamaica, elev. 2000-2500 feet, 28 April 1970; "Tree 15-20 feet; corolla white; buds pink-brown."

This new variety differs from typical Psychotria pedunculata

in having the whole inflorescence including the corollas pubescent; the tips of the leaves have a rather long acumens.

RANDIA (RUBIACEAE)

RANDIA ACULEATA L. var. JAMAICENSIS (Spreng.) C. D. Adams, comb. et stat. nov.

Gardenia jamaicensis Spreng., Syst. Veg. ed. 16, 1: 761. 1824.

Randia jamaicensis (Spreng.) Krug & Urb. in Urb., Symb. Ant. 1: 426. 1899.

Randia aculeata in Jamaica is extremely variable in leaf-size, hairiness and the presence of spines. This taxon accommodates those variants which have the young vegetative parts and corollas hairy; they do not seem to differ in any other way and thus do not warrant more than varietal rank.

RHYNCHOSPORA (CYPERACEAE)

RHYNCHOSPORA MINUTIFLORA (Rich. ex Spreng.) C. D. Adams, comb. nov.

Scleria minutiflora Rich. ex Spreng., Syst. Veg. ed. 16, 3: 831. 1826.

Rhynchospora micrantha Vahl, Enum. Pl. 2: 231. 1805. nom. illegit.

Vahl described Rhynchospora micrantha with Schoenus rariflorus Michx. in synonymy. Besides being nomenclaturally superfluous at the time, R. micrantha Vahl refers to a distinct taxon next described by Richard as Scleria minutiflora. I am grateful to Mr. J. E. Dandy for pointing this out.

RONDELETIA (RUBIACEAE)

RONDELETIA BRACHYPHYLLA G. R. Proctor ex C. D. Adams, sp. nov.

R. hirtae Sw. affinis sed foliis minoribus sessilibus vel subsessilibus basi cordatis differt.

Frutex ramis gracilibus hirtis usque ad 3 m altus vel arbor parva. Folia late ovata basi cordata apice breviter acuminata extremum acutissima 2-9 cm longa 1.5-4.5 cm lata; lamina adaxiale nervo medio hirsuto excepto glabrescens abaxiale venis pilis appressis. Petioli 0-3(-4) mm longi. Stipulae deltato-acuminatae ca. 5 mm longae pilis appressis. Pedunculus usque ad 4 cm longus; pedicelli 0.5-4 mm longi; bractae subulatae. Calycis tubus ovoideus 2 mm longus hirsutus segmenta lanceolato-subulata 4 mm longa tenuiter pilosa. Corollae tubus 12 mm longus tenuiter pilosus coccineus vel viridis lobi orbiculares 4 mm longi distale glabri fulvi. Stylus exsertus vel inclusus. Capsula bisulcata 5 mm longa 6 mm lata tenuiter pilosa.

Type Collection: C. D. Adams 12139 (holotype UCWI; isotypes

BM, DUKE), on serpentine rocks, Arntully, St. Thomas Parish, Jamaica, elev. 2900-3000 feet, 24 January 1963 (plant in flower and fruit).

Paratypes: C. D. Adams 13236 (BM, UCWI), type locality as above, 16 July 1970 (plant in flower); also G. R. Proctor 23304 (IJ).

This new species resembles Rondeletia hirta Sw. but is distinguished by the leaves being smaller, sessile or subsessile and cordate at the base. Like many of the Jamaican species of Rondeletia, this plant has a strong tendency to develop crimson coloration in the vegetative parts, especially on the petioles and the undersurfaces of the leaves. The habit of branching is much affected by the physical situation; in the open coppice regrowth develops erect shoots with large leaves; in the shade the branches are straggly and the leaves smaller with often relatively longer petioles.

#### RYTIDOPHYLLUM (GESNERIACEAE)

RYTIDOPHYLLUM GRANDE (Sw.) Mart. ex G. Don var. LAEVIGATUM C. D. Adams, var. nov.

Foliorum superficies laevigata.

Type Collection: C. D. Adams 6786 (holotype UCWI; isotype BM), collected on open rocks, near Burnt Hill, Trelawny Parish, Jamaica, elev. 1300 feet, 8 April 1960; "Shrubby to 8 feet; leaves mostly distal, lemon-scented; buds sticky; corolla yellow."

Paratype: M. duQuesnay 17 (UCWI), collected in thicket, south of Ramgoat Cave, Trelawny Parish, Jamaica, elev. 1500 feet, 10 December 1968; "Slender tree 11 feet; leaves dark; stems reddish; flowers lemon yellow."

This variety is distinguished from var. grande by the smooth leaves and the usually somewhat less branched inflorescence. Other specimens, e.g. G. R. Proctor 16645, R. A. Howard & G. R. Proctor 14418 and R. A. Howard, G. R. Proctor & Wm. T. Stearn 14656 in herbaria BM, GH and IJ exist but are not available to the author at this time; they originated from the same locality and also extend the range into the parish of St. James.

SCAEVOLA KILAUEAE VAR. POWERSII Deg. & Deg.

Otto & Isa Degener, Volcano, Hawaii

Degener Nos. 21,762 and 21,763, collected at "Keaouhana Forest Reserve, near Pahoa, Hawaii. Among scrub; spreading 2 ft. high bush. Feb. 2, 1952.", comprised such a curious taxon "with robust leaves," that the collector suspected it to be a new variety of Scaevola kilaueae Deg. Yet fearing the specimens might, after all, simply represent plants of the species s.s., especially robust because growing under conditions of exceptional rainfall and rich soil, he left the many sheets lying fallow for nearly twenty years in the herbarium of the "Museum botanicum Berolinense" in Dahlem.

Interest in the above was revived when Dr. Howard A. Powers, geologist stationed on the brink of Kilauea Crater, Island of Hawaii and a keen amateur botanist, drew the attention of the writers to a curious naupaka he had discovered. A few twigs were collected and labeled as follows: "Degener & Degener No. 32,441. X Scaevola kilaueae X S. chamissoniana var. bracteosa Hillebr. Old look out at Pauahi Crater, Haw. Volc. Nat. Park, Hawaii. In scrub at 3,200 feet within 1 meter of S. k. (D. & D. 32,442) & 1 km. of S. c. b. on Puu Huluhulu. Discovered by Dr. Howard Powers. (Collected by Degeners) July 22, 1970."

Because of the resemblance between Nos. 21,762, 21,763 and 32,441, we believe the former two plants represent not a simple hybrid like probably No. 32,441, but rather a more or less constant variety of early hybrid origin. We surmise a plant like No. 32,441 with its limited gene pool, if isolated for a hundred generations or so by surrounding veneers of lava in a kipuka (lava oasis), would de novo evolve into a taxon resembling the new variety described below:

SCAEVOLA KILAUEAE var. POWERSII Deg. & Deg. Frutex 7 dm. altus, ramis ramulisque divaricatus. Folia rigida coriacea, 50 - 85 mm. longa, 12 - 20 mm. lata, margine 6 - 10 serrato-dentata. Corolla flava. This variety, represented by the type Deg. & Deg. No. 21,763 mentioned above and returned to Berlin for deposit, is intermediate between S. chamissoniana var. bracteosa Hillebr., and S. kilaueae Deg., with features of the latter predominating. For instance, it is a shorter, more spreading shrub than the former taxon. Its leaf size is almost of the former, yet the texture is leathery, with only midrib showing on both surfaces and ribs showing faintly on lower surface. The few serrate-dentate teeth end almost columnar as does the apex of the leaf itself. S. c. var. bracteosa, on the contrary, has subcoriaceous leaves in which ribs and veins are prominent on both surfaces, and the teeth are more numerous and more extensively distributed. The inflorescence in length approaches that of the former; though the flowers are less in number, about 25 mm. long, narrow-lobed, and dull yellowish.